

**Abstract of the Disclosure**

A system and method is capable of identifying multipath wireless signals, their relative strength, and their position. The system and method may be used in wireless distance measurement to generate a distance measurement free of multipath distortion.

- 5 First and second wireless devices transmit and receive signals to generate multipath information. For distance measurements, this information may be used to calculate the true distance between two wireless devices that is compensated for multipath. The system and method may be used in a mobile wireless communications system to discriminate between various mobile wireless communications devices located in a region, for example, to
- 10 conduct a commercial transaction or transmit or receive other information.